

Date: Mon, 12 Jul 93 18:08:37 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #845
To: Info-Hams

Info-Hams Digest Mon, 12 Jul 93 Volume 93 : Issue 845

Today's Topics:

 ** FLEA at MIT ** Sunday 18 July Cambridge MA **
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 CDE antenna rotor
 Cobra 32 XLR
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 TUNING A WIERD LOAD.... (2 msgs)
 VE Test Conditions
 What does it take to fry RG-223

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 Jul 1993 00:54:16 GMT
From: w1gsl@athena.mit.edu
Subject: ** FLEA at MIT ** Sunday 18 July Cambridge MA **
To: info-hams@ucsd.edu

This coming Sunday

***** \$1 buyers discount with hardcopy of this notice *****

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS

FLEA all SUMMER at MIT
July 18th, 1993
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take place on the third Sunday of each month this summer, April thru October.

There is tailgate space for over 400 sellers and free, off-street parking for >1000 cars!

Buyers admission is \$2 (you get \$1 off if you're lucky enough to have a copy of our ad) and sellers spaces are \$10.00-each at the gate.

The flea will be held at the corner of Albany and Main streets in Cambridge; right in the Kendall Square area from 9AM to 2PM, with sellers set-up time starting at 7AM.

!! RAIN or SHINE !! Have no fear of rain, a covered tailgate area is available for all sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

***** \$1 buyers discount with hard copy of this notice *****

Steve Finberg W1GSL w1gsl@athena.mit.edu
PO Box 82 MIT Br Cambridge MA 02139 617 258 3754

Date: 12 Jul 93 20:20:36 GMT

From: swrinde!gatech!prism!ccoprfrfm@network.UCSD.EDU
Subject: Advanced Computer Controls Mailing List
To: info-hams@ucsd.edu

Hello,

I am the list owner of a mailing list for people who have/are interested in Products produced by Advanced Computer Controls Inc. (ACC). For those who might not know what ACC does; they produce products (mostly for the amateur radio service) such as repeater controllers, digital voice recorders, remote base control units, etc.

If you have one of their products, or use a repeater that has one of them, then you might be interested in joining the list. To do so, simply send a mail message to listserv@gitvm1.gatech.edu. In the body of the message, simply say "subscribe acc-l <your name>". That's all there is to it.

If you think you would like to be a part of this list, but are worried about getting on a high-traffic list; don't (worry that is). We get somewhere between 10-15 messages a month on average. That doesn't mean that there is nothing to gain from the list though. Remember, a mailing list is only as good as the people who take part in it....

Hope to see you on the list,

Monte Freeman - KC4GPW List Owner

--
Monte Freeman -- Operations Department / Information Technology
Georgia Institute of Technology, Atlanta Georgia, 30332
Internet: ccoprfrfm@prism.gatech.edu
Bitnet: ccoprfrfm@gitvm1.bitnet

Date: 12 Jul 1993 17:17:15 -0600
From: stan!not-for-mail@uunet.uu.net
Subject: Alinco DJ-180 Pros/Cons wanted
To: info-hams@ucsd.edu

I'm currently looking for a nice 2m HT to do some SKYWARN spotting with, and my eye has hit upon the Alinco DJ-180T. It's cheap and seems to be a better bargain than the HTX-202 (at least when RS doesn't have the 202 on sale). More importantly, it can RX the NOAA Weather frequencies. Anyone have anything to say about it, pro or con? (Email is preferred; I'll summarize if there's interest).

Thanks in advance...

--

William Kucharski, Solbourne Computer, Inc.	Opinions expressed herein
Internet: kucharsk@solbourne.com Ham: N00KQ	are MINE alone, NOT those
Snail Mail: 1900 Pike Road, Longmont, CO 80501	of Solbourne Computer, Inc.
President, "Just the Ten of Us" Fan Club	"Dittos from Longmont, CO"

Date: 13 Jul 1993 00:31:45 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!darkstar.UCSC.EDU!cats.ucsc.edu!
haynes@network.UCSD.EDU
Subject: Be Careful What You Chew!
To: info-hams@ucsd.edu

There was a little item in the back of the newspaper last week about a man who was found, on a routine health screening, to have lead poisoning. He was an electrician who was in the habit of chewing on little pieces of insulation stripped off wires. The lead was said to come from the coloring matter in the insulation. I guess they don't use USDA approved food coloring.

--

haynes@cats.ucsc.edu
haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"
"No it aint! But ya gotta know the territory!"
Meredith Willson: "The Music Man"

Date: Mon, 12 Jul 1993 19:46:11 GMT
From: news.kpc.com!kpc!nat@decwrl.dec.com
Subject: CDE antenna rotor
To: info-hams@ucsd.edu

Hi,

I picked up an antenna rotor at the Foothill College Fleamarket. The following information came off the rotor controller box.

Model AR-33 115V AC 60Cyc 1.0 Amp.
Made by
Cornell Dubilier Electronic Division
Federal Pacific Electric Co.
Fuquay-Varina, North Carolina.

Pat NO 3,043,998.

Series 1 - 820.

The rotor takes a 5 wire control cable.

Anybody know anything about this beast.

1. How much torque does it generate?
2. What wind load can it support?
3. How do I align it to North? (At the bottom of the controller there are 2 adjustments. a) Extent of rotation b) Sensitivity.)
4. How old is this? Not that it matters. I paid \$25 and it rotates.

I am going to take it apart to clean and regrease the bearings. So a service manual may be of help. What type of grease should I use? I live in San Jose and it is sunny most of the time.

Thanks in advance.

Nat.

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

Date: 12 Jul 93 21:02:49 GMT
From: uchinews!raistlin!timbuk.cray.com!hemlock.cray.com!mfl@rsch.wisc.edu
Subject: Cobra 32 XLR
To: info-hams@ucsd.edu

I'm looking for the schematics for a Cobra 32 XLR. Can anyone help ?

- Matthias

Date: Mon, 12 Jul 1993 20:54:15 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!newsrelay.iastate.edu!
news.iastate.edu!wjturner@network.UCSD.EDU
Subject: Code test gave in same room as written - WHY????
To: info-hams@ucsd.edu

First of all, congratulations and welcome to ham radio!!!

As for the CW in the same room, that is the way I've always seen the test session handled. One thing that they mentioned to me when I took the test for Novice and Tech was that I could actually take the written test while the CW was not being sent. This might take a little longer, but it may help

if you are having trouble concentrating.

73 es cul, Will.

```
--
Will Turner,  NORDV
wjturner@iastate.edu      | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu  | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov | -----
```

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-----
Date: 12 Jul 93 13:05:32 est
From: psinntp!arrl.org@uunet.uu.net
Subject: How is Collins equipment ?
To: info-hams@ucsd.edu
```

In rec.radio.amateur.misc, dbraun@intel.com (Doug Braun) writes:

>Dave Newkirk (dnewkirk@arrl.org) wrote:

>
>: Thanks! Yes, that's more or less the Collins system redone;
>: think Kenwood brought it in the TS-820. Fun if you twist the IF
>: Shift knob *really fast* -- you can hear a little pitch wobble
>: because time delay through the intervening filtering causes the
>: shifted signal to arrive at the second-osc-driven mixer a bit
>: late. Result: *Momentary* pitch shift, the magnitude of which
>: varies directly with how fast you slew the oscillator(s).

>
>I might humbly suggest that another reason could be that
>since both synthesizers have to adjusted by the CPU, they
>don't get adjusted at exactly the same time, but instead
>one after another, so for an instant after you turn the knob,
>they aren't synchronized?

Well, what I was trying to cobble together here is that I don't think I've heard this effect on relatively late CPU-controlled Kenwood radios with IF shift. The TS-820, -830, -120, -130, -530 (list not all-inclusive) have electronic IF shift and synthesizers, but no CPU. *They* are the radios in which I've heard this IF-shift pitch wiggle. It would be "just code" to mask the effect in radios using CPUs to do most of the freq-control housekeeping, whatever the control input means.

Yes, this is a possible point of departure for a thread on how various CPU-controlled radios do their IF shift--A/Ding pots voltage for control versus shaft "encosion" [well, hey, if

eroding something causes *erosion*, doesn't *encoding*
something cause *encosion*? :-0], etc--but I'm bailing out.

Regards/WJ1Z

David Newkirk, Senior Asst Tech Editor | voice: 203-666-1541 X280
American Radio Relay League | fax: 203-665-7531
225 Main St, Newington CT 06111 USA | net: dnewkirk@arrl.org

Date: Mon, 12 Jul 1993 17:17:09 GMT
From: usc!sdd.hp.com!saimiri.primate.wisc.edu!news.crd.ge.com!sunblossom!
knight.vf.ge.com!news.ge.com!psinntp!psinntp!bnlux1.bnl.gov!skora@network.UCSD.EDU
Subject: Info on Kenwood TS-50s ?
To: info-hams@ucsd.edu

Hi. I'm collecting any info/comments/reviews on the Kenwood TS-50s
"compact" transceiver in anticipation of getting it for a mobile setup.
Any input will be appreciated!

73- John, KC2JT

--

John Skora
skora@pdb.pdb.bnl.gov
516-282-5750 office
Protein Data Bank Computing Systems
Brookhaven National Laboratory
Building 555, Chemistry Department

Date: 12 Jul 1993 16:41:58 -0500
From: concert!gatech!howland.reston.ans.net!math.ohio-state.edu!cs.utexas.edu!
gerald@cc.utexas.edu!emx.cc.utexas.edu!not-for-mail@decwrl.dec.com
Subject: machine-generated cw
To: info-hams@ucsd.edu

levin@bbn.com (Joel B Levin) says:

>oo7@emx.cc.utexas.edu (Derek Wills) writes:
>|jgd@dixie.com (John De Armond) says:
>|>When I tune across the dial I hear maybe a couple hundred machine-generated
>|>CW conversations going on. One must presume this is computer to computer
>|>communications ...
>| This is an ignorant statement. What do you mean by "machine-generated CW"?

>Well, the original remark was pretty content free anyhow. Technically

>speaking, since the lever is one of the basic machines of physics,
>even a brass pounder with a straight key qualifies as using a machine
>to send CW. I guess only the guy sending by touching two bare wire
>ends together qualifies as not using a machine.

I might have taken that charitable view of the posting had the poster not said "One must presume that this is computer to computer communications". Unless the brain is included as the computer (in which case I also hear machine-generated SSB conversations going on, so presume computers are being used and therefore SSB is obsolete, etc...), I think his meaning was "wow, this stuff is too fast for me, they must be using one o' them darned computer thangs".

CW sending is still an art, and none the worse for that.

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

Date: 12 Jul 1993 16:36:14 -0700
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!
cs.utexas.edu!asuvax!chnews!ornews.intel.com!ornews.intel.com!not-for-
mail@network.UCSD.EDU
Subject: machine-generated cw
To: info-hams@ucsd.edu

In article <21slr6INNo60@emx.cc.utexas.edu> oo7@emx.cc.utexas.edu (Derek Wills) writes:

>
> CW sending is still an art, and none the worse for that.
>

Without any kind of recognizable character such as swing, syncopation, or other recognizable fist it seems like pretty sterile art to me. Kinda like a painting of a polar bear in a snow storm. Hams who use iambic paddles and such might as well be using a computer. I can't tell the difference.

WA7LDV who still uses a J-38 (J-36 on Sundays)

Date: 12 Jul 93 19:04:41 GMT
From: news-mail-gateway@ucsd.edu
Subject: PED

To: info-hams@ucsd.edu

Any PED users out there? I'd like to hear from you.

73 de K2WK

Date: 12 Jul 1993 18:28:11 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!usenet.ucs.indiana.edu!
master.cs.rose-hulman.edu!news@network.UCSD.EDU
Subject: SWR!
To: info-hams@ucsd.edu

I have a shortened (51 ft) G5RV that really gets out on 20 and 40
> meters and but isn't all that great on 10 and 15 meters. When I checked
> the SWR on 20 it is about 2.7:1 more or less across the band. 40 is a
lot
> worse as is 15 and 10 meters. However it loads up great on 20 and 40
> and works great there. It will load up on 15 it doesn't work all that
> well and 10 is worse then that. My question is why doesn't it work as
> well on 15 and 10 as 20 and 40 do? As a antenna itself doesn't actually
> have to be resonant on a frequency is it just radiation efficiency
> that determines whether a antenna works well or not? I am not really
> sure why two antennas, both non-resonant, will have one that works
> much better then the other one. Thanks for any answers here!

Jeff:

Probably because "all other things aren't being equal". I wonder if the
power into the antenna (antenna = radiating thing) is the same in each
case. Also height above ground can affect performance. This height
(referenced to a wavelength) varies with frequency.

Also the radiation pattern is very different as the length (again in
electrical degrees) of the antenna (antenna = radiating thing) changes,
when the frequency changes.

In short, as you change frequency, it's not the same antenna.

73 de K9CUN, Jack

Date: 12 Jul 93 17:46:48 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: SWR!
To: info-hams@ucsd.edu

In article <CA28BJ.H8G@cbnewsm.cb.att.com>, jeffj@cbnewsm.cb.att.com
(jeffrey.n.jones) wrote:

> I have a shortened (51 ft) G5RV that really gets out on 20 and 40
> meters and but isn't all that great on 10 and 15 meters.

Jeff-

One factor to consider, is that a dipole such as this, will radiate more
toward the end at higher frequencies, and more broadside on lower
frequencies. Maybe there aren't any stations in the direction it favors on
10 and 15.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 12 Jul 93 18:17:47 GMT
From: att-out!cbnews1!dara@RUTGERS.EDU
Subject: TUNING A WIERD LOAD....
To: info-hams@ucsd.edu

In article <21heoqINNgla@mthvax.cs.miami.edu>, guest@phoenix1.ir.miami.edu (Guest
Account) writes:

> HELLO OUT THERE.....

>

> I have an interesting r.f. matching problem. We are in a plasma physics lab that
is using ICOM equipment to drive an experiment. I am looking for either a
> Dentron Monitor Tuner, a Drake MN-2000 or a Drake MN-2700. I am told that I
> these devices can "load a lawn chair..." with no problem. My problem is
> that I can provide a good match (less than 1.3:1 SWR CW@18.134MHz) but
> when stuff starts to change in the experiment so does the impedance. We have
> an ICOM-781 with the 2klps and the at500 but we still cook things when the
> impedance changes quickly. If anyone has any ideas or information regarding
> "ANY" way that we can operate with a rapidly varying load I would be interested
in hearing it. We have a 60MHz tube transmitter that was a little more robust
> but it also takes a beating. I have also tried to run a dummy load in parallel
with the plasmano luck....thanks 4 the help

>

> Jonathan Alexander Walkenstein A.K.A. guest@phoenix1.ir.miami.edu

>

>

Some years ago I worked with rf plasmas in a large metal (read: shielded)
vacuum chamber. I used an industrial rf source (tubes) that put out about
400 watts. I got best results around 27 MHz (honest, it really did work

best there). As pointed out, the impedance changes from very high to quite low as soon as the plasma starts and it was necessary to adjust the matching network while trying to start the plasma. I used both a Johnson KW Matchbox and a Murch 2000B which was a ARRL handbook design. The Johnson worked best. The roller inductor in the Murch overheated and sagged. The capacitors in the Johnson got quite warm and became hard to adjust during long operating times but they survived and were easy to turn once they cooled down. I had to use coax feedlines that could stand a lot of heat. I found some fiberglass wrapped teflon dielectric coax used for broadcast service (RG 225???)

Have fun

Shel WA2UBK dara@physics.att.com

ZZ

Date: 12 Jul 1993 17:19:13 -0400

From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!darwin.sura.net!
news-feed-1.peachnet.edu!concert!borg.cs.unc.edu!not-for-mail@network.UCSD.EDU

Subject: TUNING A WIERD LOAD....

To: info-hams@ucsd.edu

>In article <21heoqINNglA@mthvax.cs.miami.edu>, guest@phoenix1.ir.miami.edu (Guest Account) writes:

>>

>> I have an interesting r.f. matching problem. We are in a plasma physics lab that is using ICOM equipment to drive an experiment. I am looking for either a
>> Dentron Monitor Tuner, a Drake MN-2000 or a Drake MN-2700. I am told that I
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>> that I can provide a good match (less than 1.3:1 SWR CW@18.134MHz) but
>> when stuff starts to change in the experiment so does the impedance. We have
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>> "ANY" way that we can operate with a rapidly varying load I would be interested
in hearing it. We have a 60MHz tube transmitter that was a little more robust
>> but it also takes a beating. I have also tried to run a dummy load in parallel
with the plasmano luck....thanks 4 the help

>>

>> Jonathan Alexander Walkenstein A.K.A. guest@phoenix1.ir.miami.edu

One of the best buys I have ever made was at a surplus auction where I got two complete plasma rf generator systems made by Plasma-Therm (or something like that) in New Jersey. Phone 609/767-6120 (according to Thonas Register).

One sub-unit was a 500w 13.xx MHz Rf generator (oscillator driving a 6146 driving a 4-400). This has a Pi-net output with fixed loading caps. The other sub-unit is the really nifty part and why you should try to find if this company is still around. It is an automatic matching L network -

shunt motor-driven vacuum variable on the input with a coil (big, silver plated) and another motor-driven vacuum variable in series with the load. A directional coupler feeds a control system to drive the two vacuum variables to minimize VSWR. I have no idea what the response time to changing loads was supposed to be.

I would think these people make the right kind of equipment for your application much more than any applicable ham gear. I imagine they are expensive when new. I was very pleased to get two systems (power supplies and all) at a surplus auction for \$25 :-)
A friend and I plan to have fun making these into useful ham gear :-)

Nick England KD4CPL
nick@cs.unc.edu

Date: Mon, 12 Jul 1993 17:26:49 GMT
From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!torn!nott!cunews!freenet.carleton.ca!Freenet.carleton.ca!ae517@network.UCSD.EDU
Subject: VE Test Conditions
To: info-hams@ucsd.edu

In a previous article, hlester@as.arizona.edu (Howard Lester) says:

>Although I successfully passed the Extra Class license elements (hooray!), I
>am appalled at the noise level allowed at the two separate testing sites I
>attended. Without mentioning any names or affiliations, I will just say that
>the first site I attended was virtually a party, with plenty of talking,
>chatter, and laughing on the parts of both the examinees (who were not, at
>that moment, being examined) and the VE's themselves.

>
>At the second site the noise was not as bad, but how could any noise be
>allowed at a testing site? This is an examination, where concentration is
>required (for many of us!). This is NOT a party nor a place to discuss radio
>equipment.

>
>Any other experiences? Is this common?

>
>Howard hlester@as.arizona.edu

>
>
When I wrote my exams in May, for the first few elements, the room was quite quiet. But as the day progressed, the noise level became progressively higher, as well. By the time I got to element 4B, I could scarcely concentrate for the QRM, and after 5 exams, as well as the CW exam, I was at the end of my tether! They had a separate enclosed room for the CW test, which was very quiet, certainly

during the test! :-)) Still waiting on my licence.

73 de ve3uav/aa8??

--

Date: Mon, 12 Jul 1993 20:30:52 GMT
From: news.kpc.com!kpc!nat@decwrl.dec.com
Subject: What does it take to fry RG-223
To: info-hams@ucsd.edu

Hi,

My station is a Kenwood TS520S, rated to produce a Max of 150 watts. I have a new antenna to hook up. MECI of Ohio sells RG-223 for 10c/foot. The question that I had was, "Will 150 watts fry the cable".

RG-223 specs is as follows:

50 ohm 66% Velocity Factor 30.8 pf/foot OD 0.212".

Polyethylene Dielectric, Double Shielding, Max RMSV 1900 Volts.

Here is how I went about answering the question.

$Power = VRMS \times VRMS / R$

$VRMS = \sqrt{POWER \times R}$
 $= \sqrt{150 \times 50}$
 $= 86.6 \text{ Volts.}$

Assuming horrible antenna match the Max SWR should be $(1900/87) = 21$.
I think the cable will survive.

Could the Gary Coffman types find a hole in my thinking or show me the correct way to look at this problem.

Thanks in advace
Nat.

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

Date: Sun, 11 Jul 1993 23:45:11 EST

From: anomaly.sbs.com!kd1nr!news@uunet.uu.net
To: info-hams@ucsd.edu

References <QC3DAAC3@mmpc6>, <C9wy5p.1s0@eis.calstate.edu>,
<1993Jul11.232248.7816@rsg1.er.usgs.gov>-state.
Subject : Re: VE Test Conditions

bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:

> When testing for my tech recently, I experinced some of the 'fellowship'
> of ham radio. One guy had come with his wife, who was going for her
> ticket. He wanted to to take the 20 WPM code test just for practice. The
> VE's said that that they couldn't do that - and suggested that he just pay th
> e
> \$5 and go for it. He was reluctant, because he said he wasn't ready. Pretty
> soon everyone in the room was hollering for him to 'go for it' - kinda
> sounded like a game show! He finally did go for it and passed! He walked
> out of there with his extra - and a mild case of shock...

Sheesh... I wish that had happened to me. I only tested twice on my 20.
But one thing I've found... if I go in to take a test, I always passed
it. So here I sit, at Extra and wondering what else I can do in the way
of licenses. :)

Tony

```
      o      o Tony Pelliccio, KD1NR, Control Op 441.750+, ARRL VE
      \      / system @ garlic.sbs.com
      \__/_/
    -----(oo) Cow humor. Sort of like the Far Side.
  /|  ___ \_/
 / | {MTV}|| MooTV - Rockin' into the 90's
* ||{___}||
  ||-----|| (And people thought my last .sig was long, ha!)
  ^^      ^^
```

End of Info-Hams Digest V93 #845
